

Brigade Command Policy # 01-16

AFZN-BA-CO

MEMORANDUM FOR 1<sup>st</sup> BRIGADE COMBAT TEAM

SUBJECT: Safety Policy for the Tactical Use of Portable Space Heaters

1. References:

- a. Technical Manual 10-4500-200-13 (w/changes 1-19 or most current), 30 NOV 94, Heaters Space: Radiant Type Portable.
- b. Technical Manual 9-4520-257-12&P, 17 SEP 92, Operators and Units Maintenance Manual Heater, Space, Radiant, Large (H-45) (Type 1, Solid Fuel) (NSN 4520-01-329-3451).
- c. Army Regulation 600-55, 31 Dec 93, Motor Vehicle and Equipment Operator Selection, Training, Testing and Licensing.
- d. Ground Precautionary Message (GPM), 3 APPR 97, GPM-SSCOM-97-01, (Operational): Fuel-Fired Space Heaters.
- e. Memorandum, MCHYB-DC-OFS, 16 OCT 96, subject: Health Hazard Assessment, Portable Kerosene Heaters.
- f. Forces Command Regulation 385-1, 31 MAR 98, Forces Command Safety Program.
- g. Memorandum, AFPI-SO (385), Interim Safety Policy for the Tactical Use of Portable Space Heaters

2. Purpose: To establish the 1<sup>st</sup> Brigade Combat Team (BCT) policy for the use of portable space heaters in field training and operations.

3. Background:

- a. Commercial portable heating devices in field training and operations pose both a fire hazard and a serious inhalation hazard from carbon monoxide, sulfur, carbon, and nitrogen dioxide and propane. If not properly vented, effluents from the combustion of liquid fuels create an environment where, over time, low concentrations of these poisonous gases cause death.
- b. Reference 1b and the U. S. Army Soldier Biological and Chemical Command web site: <http://www.sbccom.army.mil/products/field/index.htm> illustrates the latest in heater technology approved for use by U. S. Army units. These heaters offer the safest means of providing heat in field operation.
- c. In mission-critical situations, commanders may authorize the use of non-standard commercially procured heaters.

4. Policy:

- a. Units will not use nonstandard or locally purchased heaters in lieu of available tested Army equipment, except as indicated below.

b. Acquisition of nonstandard heaters is justifiable only in mission-critical circumstances. In those cases, units will obtain equipment meeting the requirements of a national standards organization, such as National Fire Protection Association (NFPA), Underwriters Laboratories (UL), American National Standards Institute (ANSI), State Guidelines, or the International Standards Organization (ISO).

c. Propane heaters will not be purchase or used, except as indicated in paragraph 6 of this memorandum.

d. Personal (individually-owned) heaters are not authorized for use in Army operations.

5. Responsibilities:

a. 1 BCT must receive approval from the first general officer in the chain of command for purchase and/or use of nonstandard heaters

b. The BCT commander will forward all requests for approval of the purchase and/or use of nonstandard heaters to the commanding general of Fort Riley, Kansas. This approval must be complete for all units subordinate to 1<sup>st</sup> BCT, whether assigned or attached.

c. The requesting unit or activity will prepare and coordinate a risk assessment with local safety, logistics, and fire protection personnel prior to submission. The approved risk assessment will be briefed to all personnel using nonstandard heaters.

d. Approved risk assessments will be reviewed quarterly or when intended use for which specific approval was granted changes. Leaders will continually evaluate risk potential and control measures to determine their effectiveness.

e. Commanders will publish written Standard Operating Procedures (SOP), which embody the principles of this policy.

6. Usage:

a. Only heaters with a ventilation system that is compatible with the shielded tent vent stack openings will be used in areas where personnel sleep. Portable forced air heaters will not be used in areas where personnel sleep.

b. Heaters will be equipped with emergency fuel shut-off.

c. Heaters must be located on a firm and level fireproof base and be located in a marked clear area free of clothing or combustible material.

d. In areas where soldiers are awake and performing duties in support of operations, (such as Tactical Operations Centers, maintenance tents, Administrative Logistics Operations Center, etc.), nonstandard heaters may be used when authorized under the requirements of paragraph 5.

e. Commanders will ensure adequate control measures are in place and enforced to minimize the risks associated with operating unvented liquid fueled heaters in these operational environments.

f. The use of heaters where no ventilation is provided, such as unvented Kerosene Heaters, is not desirable; however, these heaters may be considered for use and authorized by the approval authority where such use will not create an environment where soldiers are exposed to unnecessary risk. The use of such heaters is prohibited in facilities where ventilation is not adequate to provide a safe working environment, such as Container Express vans, and military vans and buildings.

g. A fire watch will be on duty in areas where solid or liquid fueled heaters are used. The fire watch will be briefed on watch procedures, fire fighting with appropriate extinguishing agent, and early recognition of carbon monoxide poisoning. Heaters will not be operated while unattended.

- h. Where applicable, fuel tanks will be located on the outside of tents and shelters, IAW with environmental compliance procedures.
- i. Heaters will be set-up by competent individuals familiar with leak test procedures. An inspection by the responsible unit fire safety representative will be performed before use.
- j. Heaters will be fueled, used, and maintained in accordance with manufacturer's instructions or applicable Technical Manual.
- k. Only authorized and appropriate fuels will be used.
- l. All modifications to heaters require prior authorization. The Brigade Motor Officer is the approval authority and resident expert on modifications. Commanders will ensure that heaters will be used for the purpose recommended by the manufacturer.
- m. Fuel will only be transported in approved Department of Transportation (DOT) containers.
- n. Heaters used in the vicinity of tarpaulins, canvas, or similar enclosure materials shall be located a safe distance from such material. The recommended minimum safe distance is 10 feet. It is further recommended that these enclosure materials be of a fire retardant nature. These enclosure materials shall be securely fastened to prevent them from igniting or from upsetting the heater due to wind action.
- o. Portable forced air heaters must have at least a three-square-foot opening of fresh, outside air for each 100,000 BTU/HR of rating. Even this opening to allow fresh air DOES NOT override the ban on sleeping in areas with forced air heaters.
- p. Use only the electrical voltage and frequency specified on model plate of heater.
- q. Use only three-pronged (grounded) extension cords.
- r. Unplug electrical heaters when not in use.
- s. Do not move, handle, refuel, or service a hot, operating, or plugged-in heater.
- t. Do not attach ductwork to force air heaters.
- u. Electric heaters must have automatic overheat shut-off capability.
- v. Non-standard heaters must have "cool touch" housings in place to prevent accidental burns.
- w. Non-standard heaters must have "tip-over" shut off switch.
- x. Only authorized heaters will be used to heat vehicles. When vehicle heaters are used, hatches/windows will remain partially opened to allow circulation to prevent carbon monoxide poisoning.
- y. Heater operators will be trained, tested, and licensed in accordance with unit maintenance and safety standards.
- z. Heaters will be set up and operated according to the appropriate technical and operator manuals.

## 7. Authorized Heaters:

- a. The U. S. Army Soldier Biological and Chemical Command (SBCCOM) has developed a family of space heaters authorized for use by Army units. Information regarding the performance of these heaters can be obtained on the SBCCOM web site <http://www.sbccom.army.mil/products/field/index.htm>.

b. The BCT also authorizes (with approval by the first general officer in the chain of command) use of portable forced air heaters, electric element heaters, and upright kerosene heaters that comply with requirements specified in paragraph 6 and manufacturer's guidelines.

8. Carbon Monoxide Poisoning.

a. Early signs resemble the flu (headaches, dizziness, nausea)

b. Administer First Aid to victims immediately. Clear suspected area of all other personnel until source of carbon monoxide is eliminated and area is well ventilated.

9. Devil Brigade!

//original signed//  
BART HOWARD  
COL, AR  
Commanding